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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,561	11/07/2001	Guo-Bin Wang	11113/9	3657

26646 7590 04/29/2003

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ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER
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BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/035,561

Applicant(s)

WANG ET AL.

Examiner

Christopher P Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

***Election/Restrictions***

1. Claims 1-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

2. Applicant's election with traverse of Group II Claims 31-35 in Paper No. 4 is acknowledged. The traversal is on the ground(s) that the search and examination of the application can be made without serious burden. This is not found persuasive because while searches may be expected to overlap for related inventions there is no reason to expect they would be coextensive. Additionally, these distinct inventions have acquired a separate status in the art as shown by their different classification.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding the claims 33 and 34, the limitation that the substrate is "lumen" renders the claims vague and indefinite, because a lumen is defined as the inner open space or cavity of a tubular organ, as of a blood vessel or an intestine. An inner space or cavity does not define a structure that can be coated, and certainly not a substrate having interior and exterior surfaces. For examining purposes lumen is considered a tube inserted into an inner space or cavity of a tubular organ such as a prosthesis or catheter.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 31-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Fydeler et al (USPN 4,377,010).

Fydeler et al anticipate a medical device comprising a substrate constructed and arranged for insertion into a patient and a plurality of monomer molecules graft polymerized onto the surface of the substrate from a medium having reversed phase properties from the substrate, in terms of hydrophilicity, in which the coating is hydrophilic and the substrate is hydrophobic (see abstract). The substrate is a vascular prostheses in the veinous or arterial systems, as heart patches or as heart valves, as a replacement for the brain membrane, and as catheters or the outer sheath of catheters in contact the body fluids and the like (col.2, 1.16-30). Note a lumen is determined to define in tube placed in an inner space of a tubular organ as discussed the 35 U.S.C. 112 rejections.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly

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or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 31-35 rejected under 35 U.S.C. 102(e) as being anticipated by Anders et al (USPN 6,096,369).

Anders et al anticipate a medical device comprising a substrate constructed and arranged for insertion into a patient and a plurality of monomer molecules graft polymerized onto the surface of the substrate from a medium having reversed phase properties from the substrate, in terms of hydrophilicity (see abstract), in which a hydrophobic substrate is coated with a plurality of hydrophilic monomers using an initiator (col.4, 1.1-7). The substrate is a catheter, hose, stem, tube, blood bag, probe, membrane or contact lenses used for technical, medical or biotechnical purposes (col.9, 1.57-65). Note a lumen is determined to define in tube placed in an inner space of a tubular organ as discussed the 35 U.S.C. 112 rejections.

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to

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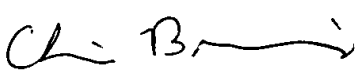
Christopher P Bruenjes whose telephone number is 703-305-3440.

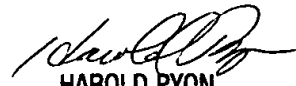
The examiner can normally be reached on Monday thru Friday from  
8:00am-4:30pm.

If attempts to reach the examiner by telephone are  
unsuccessful, the examiner's supervisor, Harold Pyon can be  
reached on 703-308-4251. The fax phone numbers for the  
organization where this application or proceeding is assigned  
are 703-872-9310 for regular communications and 703-872-9311 for  
After Final communications.

Any inquiry of a general nature or relating to the status  
of this application or proceeding should be directed to the  
receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB   
April 24, 2003

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
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